

Date: Wednesday, 1/3/2007 2:53:14 PM  
 User: Chantal Lavoie

## Process Sheet

Customer	CU-DAR001 Dart Helicopters Services	Drawing Name	AFT CAP		
Job Number	30119	Part Number	D2646		
Estimate Number	10312	Drawing Number	D2646 REV B		
P.O. Number	N/A	Project Number	N/A		
This Issue	1/3/2007	S.O. No.	N/A		
Prsh Rev.	NC	Type	PURCHASED PARTS		
First Issue	N/A	Material			
Previous Run	28041	Due Date	1/15/2007		
Written By	<i>[Signature]</i>				
Checked & Approved By	<i>[Signature]</i>				
Comment	Est: G 05.08.22 Hole size revised in Step 5 KJ/JLM				

## Additional Product

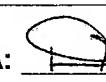
Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING  <b>Comment:</b> PURCHASING Issue P/O: <u>2785</u> <i>C 207/01/03</i> 1-Spin as per Dwg D2646 2-Material release note required  <b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total: 100.0000 Each(s) AFT CAP
2.0	D2646P	Aft Cap  <b>Comment:</b> PACKAGING RESOURCE #1 Receive & Inspect for Transit Damage Ensure Material Release Note is attached  <b>Comment:</b> DIMENSIONAL CHECK Inspect dimensions as per Dwg D2646  <b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1 1-Drill using DT8026 as per Dwg D2646. <i>SAP 07/01/2000</i> 2-Open holes to .250" and t'sink as per Dwg D2646. <i>SA 07/01/2000</i> 3-Deburr 
3.0	PACKAGING 1	PACKAGING RESOURCE #1  <b>Comment:</b> DIMENSIONAL CHECK Inspect dimensions as per Dwg D2646  <b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1 1-Drill using DT8026 as per Dwg D2646. <i>SAP 07/01/2000</i> 2-Open holes to .250" and t'sink as per Dwg D2646. <i>SA 07/01/2000</i> 3-Deburr 
4.0	QC6	DIMENSIONAL CHECK  <b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1 1-Drill using DT8026 as per Dwg D2646. <i>SAP 07/01/2000</i> 2-Open holes to .250" and t'sink as per Dwg D2646. <i>SA 07/01/2000</i> 3-Deburr 
5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1  <b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1 1-Drill using DT8026 as per Dwg D2646. <i>SAP 07/01/2000</i> 2-Open holes to .250" and t'sink as per Dwg D2646. <i>SA 07/01/2000</i> 3-Deburr 

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector
070206	S.O.	Change the Rev. back to Rev. A to use inserts AHS4-1032-130.	PH	07.02.05		07-02-06	07-02-06

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
070206	S.O.	holes oversize during the CS sinking. Material is too thin for the type of insert. Back design.	QSI042	<del>Change to oversize Rev. A inserts AS per.</del>  Drill holes & install inserts AS per Rev. A. Deburr as necessary.	MF 07-02- 08	070206	QSI042	07-02-06

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No DQA:  Date: 07/02/14

NOTE: Date &amp; initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT CAP

Job Number: 30119

Part Number: D2646

Job Number:



Seq. #:	Machine Or Operation:	Description :	
6.0	HAND FINISHING1	HAND FINISHING RESOURCE #1	
			<i>2/2/14</i> <i>07/01/12</i>
	Comment: HAND FINISHING RESOURCE #1 Acid etch and Alodine as per QSI 005 4.1		
7.0	POWDER COATING	POWDER COATING	
		<i>m103141</i>	
	Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3		<i>2/2/14</i> <i>07/02/13</i>
8.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION	
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>a.m</i>	
9.0	NAS1330C3KB116	Insert	
	Comment: Qty.: 2.0000 Each(s)/Unit Total : 200.0000 Each(s) Pick: Qty Part Number Description Batch	<i>2/2/14</i>	
	2 NAS1330C3KB116 Insert	<i>M102475</i>	
10.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	
	Comment: SMALL & MEDIUM FAB RESOURCE 1 Install inserts as per Dwg D2646	<i>M.B/a.m</i>	
11.0	QC5	INSPECT WORK TO CURRENT STEP	
	Comment: INSPECT WORK TO CURRENT STEP	<i>m 07 02 14</i>	
12.0	PACKAGING 1	PACKAGING RESOURCE #1	
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: <i>CD</i>	<i>M.B</i>	

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector	
			Initial Design Mgr	Action Description Design Mgr	Sign & Date				

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date: Wednesday, 1/3/2007 2:53:14 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT CAP

Job Number: 30119

Part Number: D2646

Job Number:



Seq. #: Machine Or Operation:

Description :

13.0 QC21

FINAL INSPECTION/W/O RELEASE



100

Comment: FINAL INSPECTION/W/O RELEASE

100/14

Job Completion



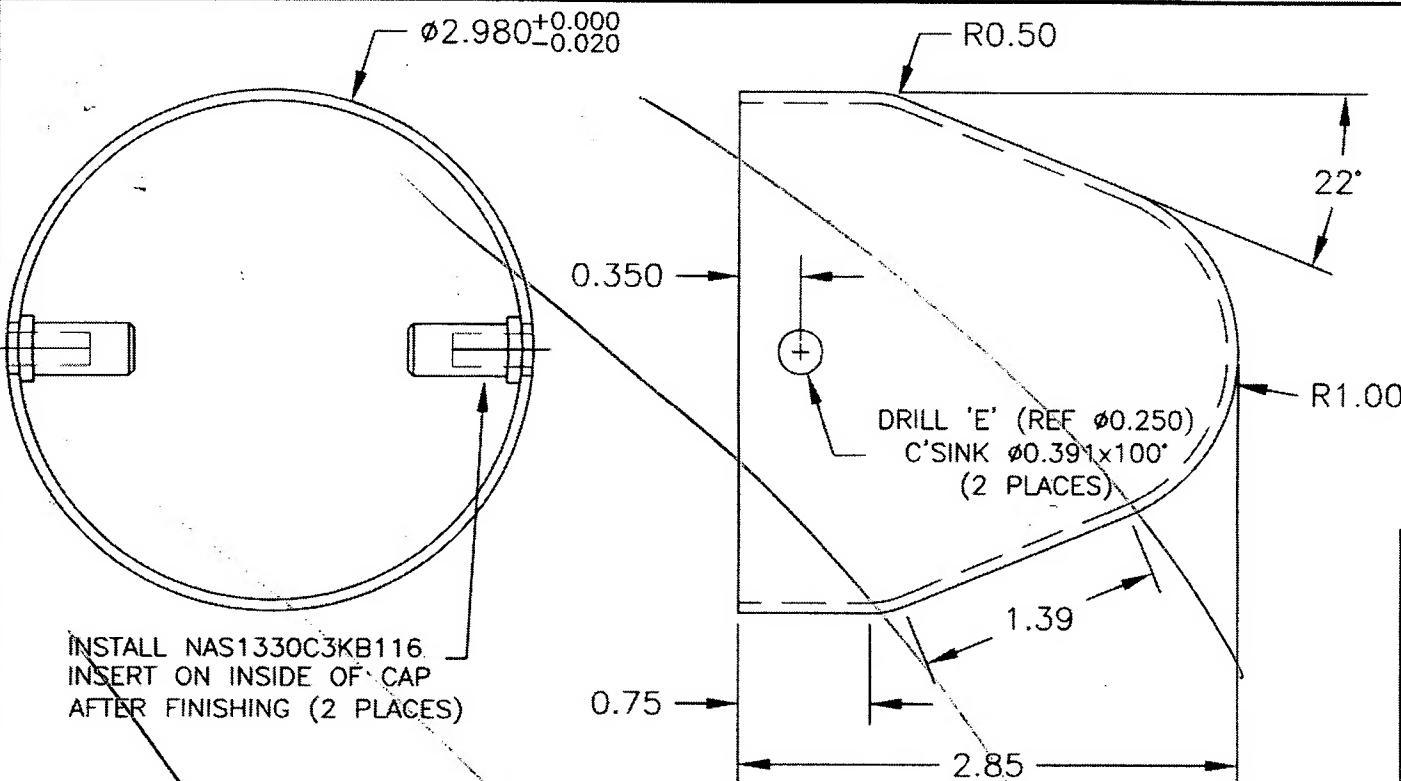
100/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



#### D2646 AFT CAP

- 1) MATERIAL: 1100-Q 0.063 THICK (QQ-A-250/1)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED  
05.08.09 ff

DESIGN DS	DRAWN BY CP	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO. D2646
DATE 05.04.01	DATE 97.03.25	TITLE AFT CAP
A	B	SCALE 1:1
05.04.01	05.04.01	REV. B SHEET 1 OF 1 CHANGE TO CLOSED INSERTS

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C207/01/03  
W/0 30119



Sieg's Manufacturing Ltd.

604 530-7455 fax 604 530-7490  
6236-205 Street, Langley, British Columbia. Canada. V2Y 1N7

## INSPECTION REPORT

DATE: Jan. 16/07

CUSTOMER: Dart Aerospace P.O. # 2785

INVOICE #: 30909 SUPPLIER #:

**DESCRIPTION OF INSPECTION:**

NOTES OF INSPECTION: Great

**NOTES OF REJECT:**



1480 Manheim Pike  
Lancaster Pa 17601

CERTIFICATION OF TEST RESULTS

SOLD TO

COPPER & BRASS SALES INC  
22355 WEST ELEVEN MILE ROAD  
SOUTHFIELD, MI 48034

SHIP TO

COPPER & BRASS SALES INC  
6555 E. DAVIDSON  
DETROIT, MI 48212

CERT NO 0000598687  
DATE 10/26/2004  
SKID NO 322296  
SKID WGT 9,760  
PAGE 1 OF 1

16048820688

ORDER NO	LB4176	PO NO	C99792
ITEM NO	1	PART NO	050393-8
ALLOY	1100	TEMPER	O
GAUGE	.06300	WIDTH	48.0000

FORM

COIL

0.0000

MILL FINISH

NON ANODIZE QUALITY

OUT: STANDARD MILL FINISH

IN: STANDARD MILL FINISH

NOT EMBOSSED

LOT: 238066 COIL: B01 DROP: 440525

INGOT	SI	FE	CU	MN	MG	CR	NI	ZN	TI
4405252	0.11	0.42	0.08	0.02	0.002	0.001	0.004	0.003	0.02

HEAD ULTIMATE STRENGTH 12.2 KSI  
TAIL ULTIMATE STRENGTH 12.6 KSI  
HEAD YIELD STRENGTH (OFFSET = .2%) 4.9 KSI  
TAIL YIELD STRENGTH (OFFSET = .2%) 5.6 KSI  
HEAD ELONGATION (G.L. = 2 IN) 35.5 %  
TAIL ELONGATION (G.L. = 2 IN) 33.5 %

CHEMICAL COMPOSITION ACCORDING TO ASTM E-1251-04  
MECHANICAL PROPERTIES ACCORDING TO ASTM B-557-02a

MECHANICAL AND CHEMICAL PROPERTIES MERT THE REQUIREMENTS OF:  
ASME SB209 1100 O, AMS 4001H 1100 O,  
ASTM B209-04 1100 O, AMS-QQ-A-250/1 1100 O

CERTIFICATION OF TEST RESULTS SHALL NOT BE REPRODUCED EXCEPT IN FULL  
\*\* END OF CERTIFICATION \*\*

*John Henry C. Stagg  
C/S  
Raele C. Stagg*

This document certifies the material above has been tested in accordance with applicable specifications described herein and has met those requirements. The material is subject to terms and conditions on the Alcoa sales order agreement.

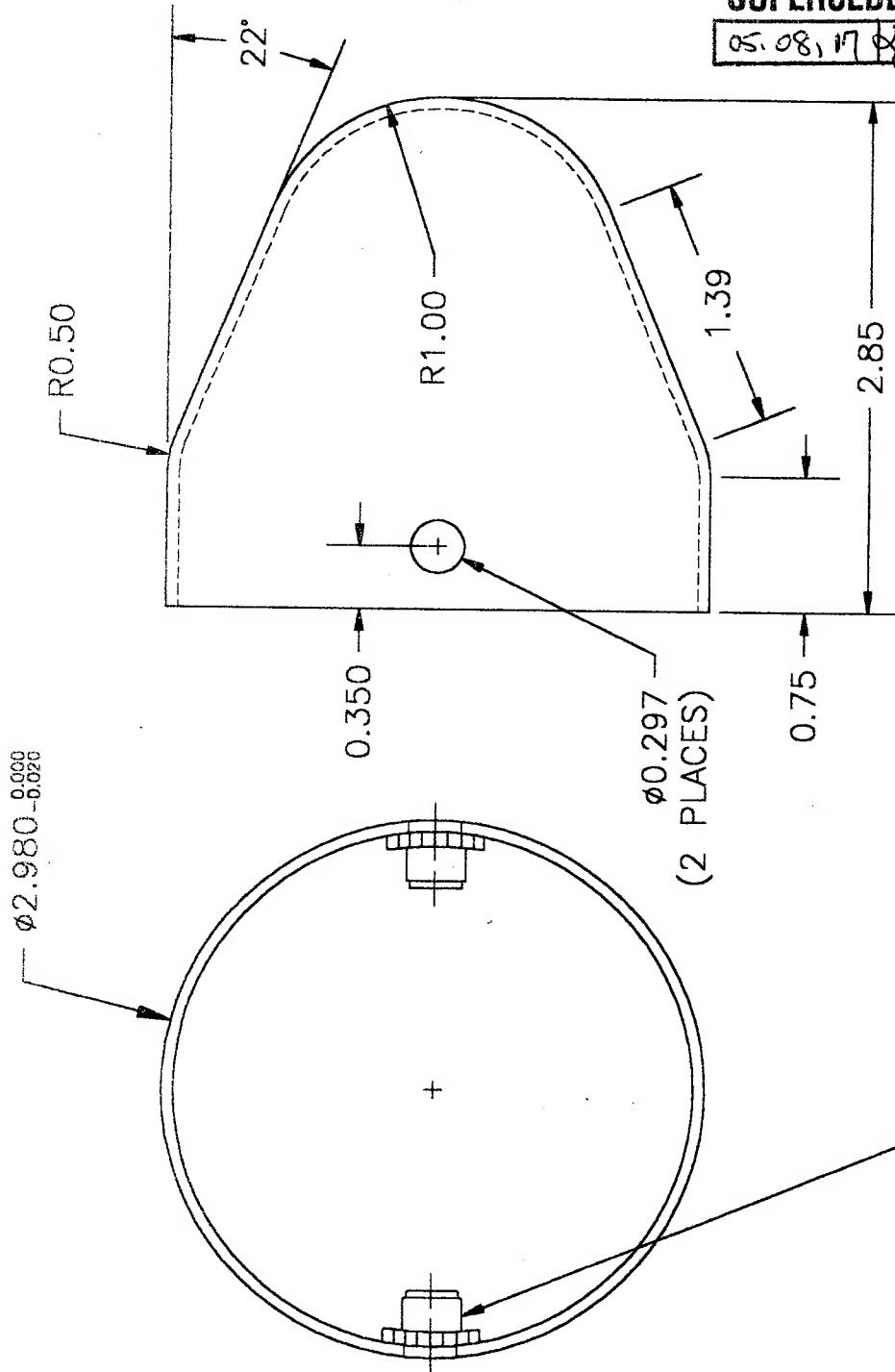
Authorized By:

JEFF FREADY, LAB SUPERVISOR



**DART**A COPY OF  
THIS DRAWING  
IS HELD  
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DART  
LIBRARY

DESIGN <i>MM</i>	DRAWN BY <i>MM</i>	DART AEROSPACE USA, INC. FAIRCHILD INTERNATIONAL AIRPORT, WA
CHECKED <i>BS</i>	APPROVED <i>MM</i>	DRAWING NO. D2646
DATE 97:03:25		REV. A SHEET 1 OF 1 1:1



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *30119*

MATERIAL: 1100-0 0.063 THICK (QQ-A-250/1)  
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED